

Cytokine regions susceptible to protease attack identified by structural alignment with Lead mutants

of IFN α -2b

IFN- α 2b

CDLPOTHSLGSRRTLMLLAOMRRI SLFSCLKDRHDFGFPQEEFGNQFQKAETIPVLHEMIQQIPNLPSTKDSAAWDETLLDKFVTELYQOQNDLEACVIQG

VGVTETPLMCDSTLAVRKYFORITLYLKEKKYSPCAWEVRAEIMRSFSLSTNLOESLSRKE

Exemplary protein of the interferons/interleukin-10 family

IFN- β MSYNLLGFLQRSSNFQCKLLWQNLNCRLEYCLKDRMNFDPPEIKQLQFQKEDAALTIVMLQNIFAIFRQDSSSTGWNETIVENILLANVYHQINHLKTVLEEK

LEKEDFTRGKLMSSHLKRYGRILHYLKAKEYSHCANTI VRVEILRNFYFINRLTGYLNR

Exemplary protein of the short-chain cytokines family

APPLICDSRULERYLLEAKEAENITTGCAEHCSLNENITVPDTKVFYANKRMEVGQQAVEVWQGLALLSEAVLRQQAALLVNSSQFWEPLQLHVDKAVSGLRSL

TTTLRALGAQKEAISPDDAASAPLRTITADTFRKLFVVSNFLRGKLGKLYTGEACRTGDR

Exemplary protein of the long-chain cytokines family

G-CSF **TEIGPASSLPQSFLLKCLEOVRKIQGDGAALQEKLVSECATYKLCHPHEELVLGHSLGIPWAPLSSCPSOALQAGCLSOLHSGLPFYQGLLOALEGISPELGPTLDTLQL**

DVADFA TTIIWOOMEELGMAPALQPTQGAMPAPASAFORRAGGVLVASHLQSFLEVSYRVLRLHQAQP

FIG. 9

